DOCUMENT RESUME

ED 287 358 HE 020 753

AUTHOR Chaffee, Ellen Earle
TITLE System Strategy and Effectiveness.
INSTITUTION State Higher Education Executive Officers Association.
PUB DATE Sep 87
NOTE 39p.; Prepared for the State Higher Education Executive Officers Task Force on Role and Mission.
AVAILABLE FROM State Higher Education Executive Officers, 1860 Lincoln Street, Suite 310, Denver, CO 80295.
PUB TYPE Information Analyses (070) -- Viewpoints (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *College Administration; *Evaluation Methods; *Higher Education; *Organizational Effectiveness; *Organizational Theories; Policy Formation; *School Effectiveness

ABSTRACT

Prior work on organizational effectiveness and strategic management is applied to assessing the strategy and effectiveness of higher education systems. It is suggested that like organizations, systems need to address three kinds of effectiveness: goal achievement, resource acquisition, and constituent satisfaction. Both organizations and systems can use three kinds of strategy to become more effective: linear, adaptive, and interpretive. Guidelines to assessing system effectiveness proposed by Stephen Bailey are provided. A linear strategy is shown to be similar to Bailey's question about relations with the governor and legislature. Interpretive strategy, the most important system task, addresses Bailey's questions about institutional relations and board philosophy. Adaptive strategy recognizes volatile environments and the need for organizations to adapt. A cybernetic approach to effectiveness and strategy is considered that suggests that the methods for correcting unacceptable changes arise through trial and error. The concepts of strategic leadership and strategic policymaking are identified as fundamental to a system's success. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED287358

SYSTEM STRATEGY AND EFFECTIVENESS

Ellen Earle Chaffee
Associate Commissioner
for Academic Affairs
North Dakota State Board
of Higher Education

Prepared for the
State Higher Education Executive Officers
Task Force on Role and Mission

September 1987

State Higher Education Executive Officers
1860 Lincoln Street, Suite 310
Denver, Colorado 80295

HE020 753

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

SHEEO

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

SYSTEM STRATEGY AND EFFECTIVENESS

Systems of higher education have grown in number and importance in recent years, yet the literature has given them relatively little attention. Except for occasional descriptions of what exists and prescriptive pronouncements arising out of specific experiences, writers have rarely considered what systems are and how they can improve. This paper is an attempt to begin a fundamental discussion of these issues by applying to higher education systems the substantial work that has addressed similar issues with respect to organizations.

Basing the paper on organizational theory and research requires dealing with abstract concepts. Much of the paper is conceptual, laying the necessary foundation for explaining and verifying the practical recommendations for systems that conclude the paper. Although the discussion is based on academic theory, it reaches essentially the same conclusions as did the intuition of a seasoned participant in higher education, Stephen Bailey, when he proposed the following questions as fundamental guides to assessing system effectiveness:

1. Is the intellectual/analytical work of the system,boards of high quality?
2. Is there a sense on the part of the governor and the legislature that the board's activities are helpful to them in making at least quasi-rational judgments about higher education support and development?
3. Do the affected colleges and universities feel that they are being dealt with by the board in a fair and understanding manner — granted disagreements about final recommendations?
4. Does the board operate on the basis of a philosophy of higher education that goes beyond simplistic manpower, occupational and formula projections, and that endorses a maximum amount of institutional autonomy in making decremental as well as incremental decisions?

Specifically, the paper uses work on organizational effectiveness and strategic management to discuss system effectiveness and strategy. It suggests that organizational concepts apply at the system level, with some modification. It concludes that like organizations, systems need to concern themselves with three kinds of effectiveness: goal achievement, resource acquisition and constituent satisfaction.

Both organizations and systems can use three kinds of strategy to become more effective: linear, adaptive and interpretive. The paper will describe these concepts, showing that linear strategy is similar to Bailey's question about the board's analytical work; adaptive strategy relates to Bailey's question about relations with the governor and legislature; and interpretive strategy, the most important system task, addresses Bailey's questions about institutional relations and board philosophy.

The paper will suggest an approach systems can use to deal with their multi-faceted, complex tasks. Because systems are organizations composed of other organizations, they can benefit from a cybernetic approach to effectiveness and strategy. In a cybernetic approach, a system does not attempt to control everything. Instead, it identifies the crucial variables and establishes monitors that act like thermostats to alert the system when a variable falls below an acceptable threshold.

Two new concepts, strategic leadership and strategic policy making, direct attention to the fact that much of a system's most vital activity deals with policy, not management, and with issues that transcend the institutions. Strategic leadership and policy making are fundamental to a system's success, but they rarely receive conscious attention from its officials. In fact, most system activity occurs in areas that are relatively concrete and management-oriented rather than conceptual and policy-oriented. The major contribution of this approach is that it highlights fundamental concerns with which systems should be dealing.

Systems in Higher Education

Generally, a system is a collection of public institutions of higher education with a governing board and a central staff. In some, institutions also have their own boards of trustees or there is a coordinating board which adjudicates among two or more governing boards. The ideas presented here pertain to any system that is, in effect, an organization with responsibilities regarding other formally constituted organizations.

Although rarely considered as organizations, systems too have multiple subunits, constituencies, purposes, complex interactions and other organizational characteristics. However, the operating units of systems — institutions — are more self-contained and less interdependent than the operating units of colleges (such as divisions and departments). While colleges have many people who consider themselves members of the organization, few people interact directly with a system. For these and other reasons, system policy makers and staff typically view the system as a peculiar aggregate of "real" organizations. In doing so, they lose sight of many broad issues and tasks that belong to the system as a whole. They miss the opportunities and responsibilities that derive from the fact that the whole is greater than the sum of its parts.

Higher education systems are tightrope walks. They exist at the boundary between institutions of higher education and their constituencies, which include the students, faculties, staffs and administrators of the institutions they govern, as well as the state's governor, legislature, taxpayers and potential students. Systems have grown in number and power during the past 20 years, largely in response to increasing consumer and legislative expectations for academic and fiscal accountability and, in many cases, decreasing enrollments and financial resources. Notably absent from the list is any institutional desire for benefits that might arise from establishing a system. Institutions have tended to fear system developments, not promote them.

The forces that gave rise to systems carried expectations that explain the institutions' lack of enthusiasm for the concept. Systems were to impose rationality on

what appeared to be chaos. They were to enhance efficient delivery of services and impose difficult decisions on institutions that appeared incapable of making those decisions themselves.

However, the forces that protect the interests of institutions within a system are real, not rhetorical. Certain inherent dynamics preserve institutional integrity. Institutions of higher education are professional organizations. Their functioning depends ultimately on how faculty members choose to conduct themselves. Central authorities are limited in their capacity to influence faculty behavior — limited by faculty expertise, faculty tenure, faculty expectations for collegial decision making and faculty mobility, among other factors. Furthermore, system authorities cannot know as much about each institution as its own management knows.

These countervailing forces explain why systems must walk a tightrope. Systems are accountable to such diverse constituencies that they have no hope of fully satisfying them all simultaneously. In fact, no organization at any level can hope to accomplish this end. How, then, can one know whether an organization or a system is effective? And once this is known, how can organizations or systems become more effective? These questions are the subject of considerable discussion and research as they pertain to individual organizations. The purpose of this paper is to suggest ways in which that literature might be applied to systems of higher education.

Toward a Concept of System Effectiveness

Organizational theorists and researchers have identified three major approaches to organizational effectiveness: goal achievement, resource acquisition and constituent satisfaction. Each has some bearing on a concept of system effectiveness.

Goal Achievement

Early theorists posited that the effective organization was one that achieved its goals. Assessing effectiveness consisted of identifying the goals of the organization, defining how one would know if those goals were achieved, examining the indicators of goal achievement and determining how well the organization achieved its goals.

However complex an organization may be, it has goals. In fact, organizations may be defined as collections of people who affiliate with one another because they want to pursue a goal that requires more than one person. Higher education institutions have such goals as educating students, preparing students for employment, contributing to knowledge and serving the public. Measuring the achievement of these goals is difficult because they are multi-faceted, intangible, value-laden, and sometimes incompatible with one another. Moreover, they are limitless — how much education is enough? When has an institution accomplished its contribution to knowledge?

Nevertheless, it is possible to make valuable efforts toward measuring goal achievement. When such measures are taken repeatedly over time, one can tell whether the institution is doing better now than it once did. This is the thrust of the current interest in assessing the outcomes of higher education.

Systems, too, have goals. For example, they typically seek to ensure that the institutions provide programs that the state needs and values, to coordinate boundary functions such as student transfer among system institutions and to ensure that the institutions are adequately and equitably funded for their tasks. Whether a system achieves such goals can be assessed, albeit imperfectly, if only by judging the extent to which problems do or do not arise.

The problems in assessing system goal achievement are numerous, however. The first problem is to identify all of the goals. The second is to identify methods for assessing the achievement of goals that are intangible and value-laden. In the process of undertaking these tasks, systems are likely to find that some goals conflict — for

example, ensuring that diverse programs and institutions are available while also ensuring access and smooth transfer among institutions. Goal achievement is one way of assessing system effectiveness, but it is not the only way, and it may not be the best way.

Resource Acquisition

Another approach to effectiveness is to define it in terms of the extent to which an organization obtains the resources it needs to carry out its functions. Clearly, higher education institutions must have competent faculty, able students, adequate equipment and space and the funds that make these components possible.

Systems, too, require resources. Most of what they need can be defined as the composite needs of the member institutions. However, they also require talented, influential board members and competent staff. A system's capacity to affect institutions is enhanced when it also has funds to allocate for special purposes. The importance of resource acquisition highlights how central the legislatures are to effective system functioning as the funds that enable systems to acquire other resources typically depend on legislative action.

Therefore, a key question for systems is, what motivates legislatures to provide adequate resources for higher education? While such a question is central, it has not been satisfactorily answered. The approach implies that systems should do all they can to please the legislature. But legislatures change, they have limited knowledge of higher education, and they represent only some of the interests that higher education institutions must satisfy.

Like goal achievement, resource acquisition can play only one important part in system effectiveness. Taking both concepts together permits a more comprehensive view of effectiveness, dealing with whether the system is doing what it intends to do and eliciting the resources it needs to do so. However, another approach takes a different view.

Constituent Satisfaction

The constituent satisfaction approach to effectiveness suggests that organizations continue to exist and prosper to the extent that they satisfy their constituents. If a higher education organization satisfies its students, faculty, financial contributors, board and relevant portions of the public, it may be said to be effective because it continues to elicit the energy, expertise, dollars and other raw materials that enable it to go forward.

This approach incorporates the other two by assuming that if an organization accomplishes its goals, it will obtain needed resources because those who contribute them will be satisfied and will continue to contribute. The capacity of this approach to incorporate others is one reason why constituent satisfaction is the prevailing approach to effectiveness in current theory and research.

Satisfying constituents requires that the organization define its constituencies, understand what they want from the organization and provide it. Because organizations cannot provide all of what every constituency wants, four methods of helping organizations deal with this dilemma have arisen.

First, relativism recommends balance suggesting that the organization do as much as it can for each constituency without acting to the detriment of any. The second method, dominant coalitionism, points out that every organization tends to have key interest groups with so much power that their satisfaction should be the pre-eminent goal of the organization.

Third, those who take the social justice approach recommend that the organization provide equal opportunity for every constituency to benefit from the organization. When discriminatory action cannot be avoided, it should favor the least advantaged constituency. In the case of higher education, one could argue that students typically have the least advantage in influencing the organization, so their needs should come first.

Finally, the evolutionary view points out that constituent preferences and organizational conditions change over time, so effectiveness exists in the organization's capacity to adapt to diverse preferences. In this view, the focus of attention is on becoming effective, not being effective. Organizations need sensitivity to constituent preferences, flexibility and willingness to respond.

The four theoretical approaches to constituent satisfaction do not provide clear guidance for system response. For example, systems sometimes do well when they seek balanced responses to all constituencies, when they yield to the wishes of a dominant coalition, when they ensure fair equality of opportunity to all constituencies or when they adapt over time to changing preferences. Equally often, system behavior in one mode generates strong opposing pressure to behave in another mode.

The literature does not provide definitive guidance about how to define or assess system effectiveness. Perhaps that is one reason for the tendency of most systems not to try. Systems, like organizations, tend to focus on dealing with immediate problems and making things better at the margin. They establish statewide incentive programs to improve undergraduate instruction or statewide formulas to improve equity in resource distribution, but they rarely take a comprehensive look at how well they are doing. An important purpose of this paper is to encourage them to make that effort. It may be useful for them to understand their efforts in the context of a cybernetic view of the system.

The Cybernetic System

Cybernetic logic has been proposed as an alternative to rational, analytic logic.* Rationality requires full knowledge of goals, alternatives, processes and outcomes, but people acting in complex situations cannot hope to achieve such knowledge. Cybernetic

*Robert Birnbaum (forthcoming) applies cybernetic logic to higher education management.

logic suggests that full knowledge is not necessary. Instead, people, organizations or systems can focus on selected features of their situation and use that information to make reasonable decisions.

The analogy of the thermostat is useful. Personal comfort is a function of humidity, drafts and other qualities of the environment in addition to temperature. However, we have generally decided that temperature is the key component, and we have established heating and cooling systems attached to a regulator that activates those systems when the temperature falls outside defined parameters. The thermostat does not recognize directly the effects of other changes in the atmosphere, but people who do can change the parameters accordingly. The resultant change in temperature increases personal comfort under existing conditions.

The point is, it is not necessary to control everything in order to achieve a desired result. However, it is necessary to define the key ingredients and establish methods to recognize and correct unacceptable changes in those ingredients.

The cybernetic approach suggests that the methods for correcting unacceptable changes arise through trial and error. Those involved in the system have experience that permits them to identify potential solutions. If the first one they select does not work, the thermostat or monitor will again register an error. Participants continue to select solutions until the monitor no longer registers problematic conditions.

Extending the analogy to organizations and systems suggests that they need to know what they must be sensitive to, given that they cannot be sensitive to everything that might be considered relevant. Those adopting a cybernetic approach risk overlooking important indicators, but they can minimize that risk in several ways.

One important way is to increase the number of participants in the monitoring process, making each participant responsible for a limited set of concerns. Doing so increases the number of concerns they can monitor. Relatedly, the risk is less when they have effective information and communication systems so that monitors provide

accurate readings and troublesome readings will elicit appropriate and effective responses. They also need to learn when monitors should be established or abandoned and when new parameters are needed for existing monitors.

What does this mean for systems of higher education? First, systems need to know what they have to monitor. Among the candidates for this list are legislative opinion, gubernatorial position and the state's needs for specific kinds of education and training. They also need to monitor institutional performance not only so they can correct deficiencies but also so they can communicate the merits of system institutions to key external constituencies.

In order to know what they must monitor, systems must know their purposes. Policy makers' first impulse often is to define system purposes as those of the institutions. They seek to ensure quality education, research and public service at individual institutions and collectively. Monitors would include indicators of faculty quality, teaching effectiveness, adequacy of facilities and equipment and program quality. This definition of system purpose is legitimate, but it is unfortunate if it leads policy makers too close to management concerns and operational issues.

In any case, these are only a few purposes of systems. Systems also enhance the economic development of the state. Some of the monitors for this purpose should assess state needs for skilled employees and system incentives for faculty to work with business and industry.

In addition, systems ensure efficient utilization of resources allocated to higher education. They need monitors of costs per student and program duplication and proliferation.

The typical system has all these purposes, and more. One way to deal with some of them is to delegate them to the campuses, each with its own monitor to keep institutional behavior within an acceptable range. Similar monitors might exist at the

system level for a limited number of concerns that individual institutions cannot or will not address.

Two obvious areas that may need system monitors are statewide issues (such as the overall ability of the system's institutions to address economic development needs or the credibility of public higher education among legislators) and selected indicators of institutional failure to address the problems that the system has delegated to local administration.

A hypothetical example illustrates this approach. A system board identified its primary concerns at the state and institution levels. At the state level, these concerns were meeting economic development needs, ensuring a sensible statewide program inventory, distributing resources equitably among institutions, dealing effectively with political forces and ensuring that students had access to higher education at reasonable cost.

As illustrated in figure 1, the system board established monitors for each of these concerns. For example, system staff prepared an annual report to the board (a) showing current state needs for economic development as they related to higher education functions, such as skilled employees, new knowledge and incentive structures and (b) analyzing the ways in which higher education might be more responsive.

Figure 1 also shows this system's dual approach to institution-oriented issues such as faculty quality, efficiency, program quality and adequacy of support functions. The system delegates responsibility for such issues to the institutions, but it maintains two forms of oversight. First, the system requires the institution to create and use local procedures for monitoring selected issues. For example, system policy requires each institution to evaluate every instructional program every five years. Other issues such as faculty quality, are subject only to an occasional system request for information about such gross indicators as the proportion of faculty holding the doctorate. These requests more often produce public relations statements than policy directives.

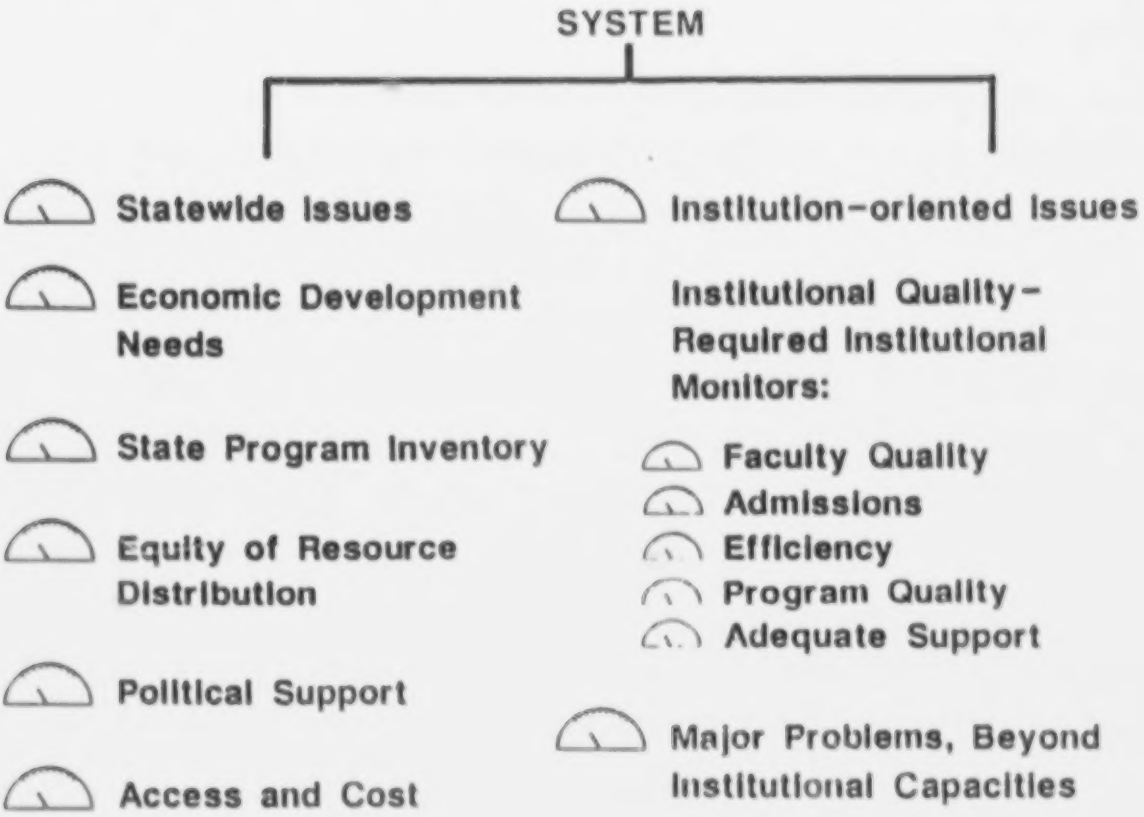


Fig. 1 Monitors in a Hypthetical System

The second form of oversight the system uses for institution-oriented issues can be likened to the "tilt" indicator on a pinball machine. The system wants to know when the institution experiences fundamental problems with which it is unable to deal alone. For many institutions in recent years, the rapid development pace and high cost of equipment for graduate study and research has created such a problem.

The system's monitors in this area consist of structured opportunities for the institutions to raise such issues (the annual budget process is a prime example) and a few pulse-taking exercises to satisfy the system that the institution is functioning well. In this system, the exercises consist of a presidential evaluation procedure and an annual look at cost per student.

This system is hypothetical. Other systems will have other monitors, depending on various factors. Monitors may reflect mandates contained in the state constitution, statutes or by-laws of the system board. Major issues or crises may give rise to new monitors that become part of a system's standard operating procedures. In the ideal situation, monitors reflect conscious attempts to anticipate problems before they arise, and they reflect that the system knows what it needs to do to be effective. Defining and implementing what the system needs to do constitute system strategy. The next section explains strategy in a system context and ties strategy back to the concept of effectiveness. The final section recommends ways systems can use strategy to increase their effectiveness.

Strategy in Higher Education Systems

Strategy in organizations is the action taken by top-level administrators and policy makers to position the organization to be effective. A higher education system is supra-organizational in that it is an organization of organizations. This fact complicates the application of strategy to a system but does not invalidate it. The chief danger of applying strategy to systems is the risk that the system will get too deeply into the

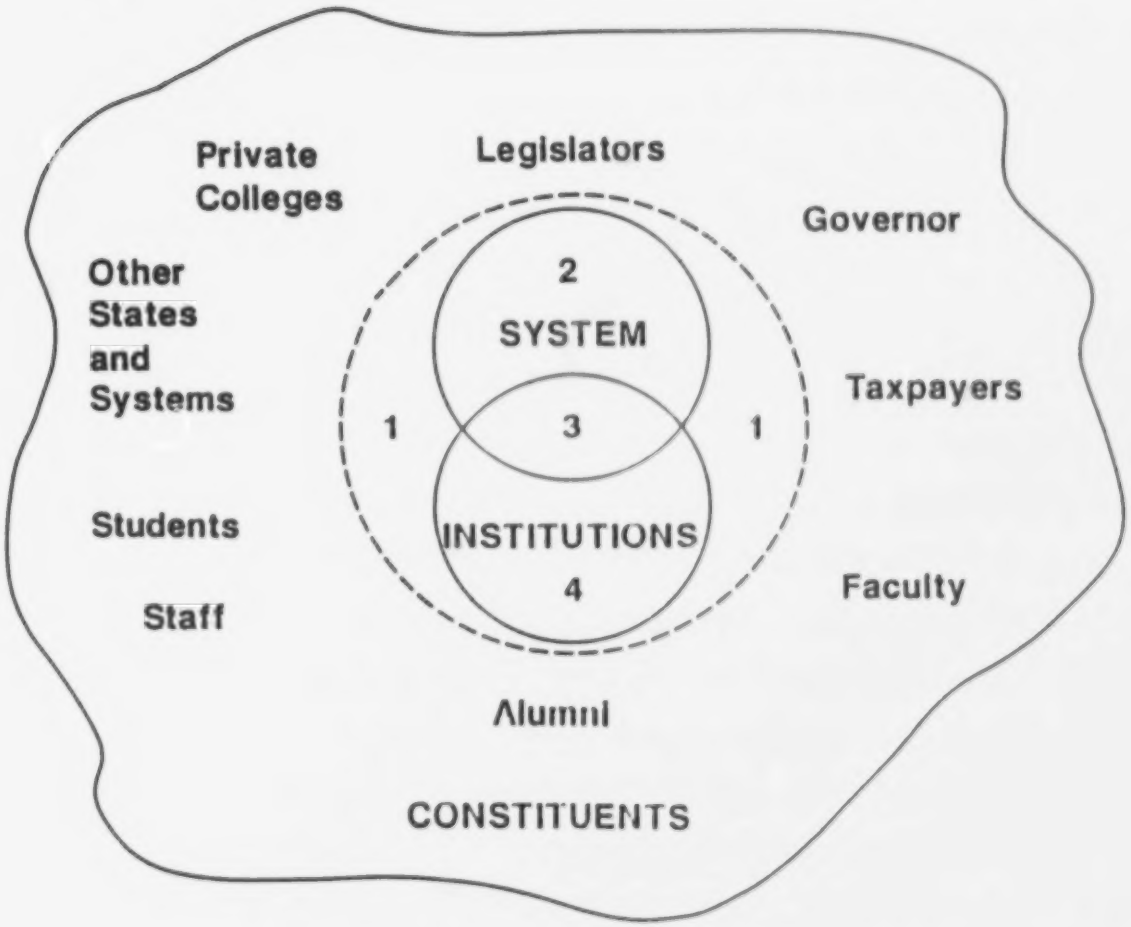
management of the constituent institutions.

To minimize that risk, this paper distinguishes between the more common strategic management and the new concepts of strategic leadership and strategic policy making. These concepts and a third, system strategic management, are the responsibility of the system, as shown in figure 2. Systems that recognize these distinctions will confine themselves to the three system-based areas and leave the institutions to conduct their own strategic management, which is the fourth area in figure 2.

The area in figure 2 that is labelled with the number 1 depicts strategic leadership. In this area, the system has overall responsibility for central and institutional welfare, and it exercises this responsibility with reference not only to internal concerns but also in response to the constituencies that support the system and the institutions. Encircling area 1 with a dotted line indicates the importance of relationships between internal and external constituencies. Government officials, the public and those inside the institutions need to have mutual understandings about why the system exists, how it discharges its responsibilities and where it is going. Establishing and maintaining these understandings are vitally important system functions.

Area number 2 is where system strategic management occurs. System officials often think of themselves as agents of other organizations, especially the constituent institutions, but they must also recognize that the system is itself an organization. On behalf of that organization, officials need to consider strategies that will enhance system functioning. Such strategies could include maintaining the credibility of central leadership through selection of board members and board staff or building trust with legislative leaders.

Area number 3 is where the system and the institutions interact as the system engages in strategic policy making. The major system activities in this area are establishing parameters for the institutions and monitoring key institutional functions.



1. STRATEGIC LEADERSHIP
2. SYSTEM STRATEGIC MANAGEMENT
3. STRATEGIC POLICYMAKING
4. INSTITUTION STRATEGIC MANAGEMENT

Fig. 2 Four Types of Strategy

Institution strategic management, area number 4 in the figure, is the responsibility of the institution's chief executive officer. It will not be discussed here.

A higher education system engages in strategic leadership, system management and policy making. Before examining these three activities separately, this section provides a discussion of the concept of strategy in general and relates it to the three approaches to effectiveness.

The Concept of Strategy

A basic premise of strategy is that the organization and its environment are inseparable. The organization uses strategy to deal with changing environments. Strategic decisions are never routine, structured or predictable because constant, often unpredictable changes occur in both the organization and its environment. Strategic decisions, by definition, are important enough to affect the overall welfare and effectiveness of an organization.

The strategy that an organization implements is composed typically of actions that may or may not have been planned in advance. Therefore, all organizations or systems make strategy, even if they do not do so consciously. They make strategic decisions, whether they call them that or not. According to the literature, their strategies may fall into one of three categories, each of which corresponds to one of the approaches to effectiveness described above. The three categories are best illustrated by analogy to three kinds of systems found in individual people.

Individual people have machine-like systems, adaptive systems and cultural systems. The skeleton is an example of a machine-like system, in which characteristics and relationships are highly predictable. Skilled observers can easily identify the location and nature of a break in the skeletal system, and they can predict the behavioral consequences of a given type or abnormality. These properties make the skeletal system

analogous to a predictable, rational, goal-oriented approach to effectiveness, which is comparable to what we will call the linear approach to strategy.

People also adapt to circumstances and changes, both physically and psychologically. If they hunger for attention and get it by screaming, they learn to scream more. If they lose one sense, they become able to learn more from their remaining senses. These capacities parallel a resource-acquisition approach to effectiveness and what we will call the adaptive approach to strategy.

Finally, people are cultural systems. They receive, process and send communications; they develop beliefs about fundamental philosophical issues and specific situations; they express emotions and affiliations in complex relationships with other people. These systems correspond to the constituent-satisfaction approach to effectiveness and the interpretive approach to strategy. They are the least predictable, the least susceptible to analysis and the most complex human systems. They are also the most fundamental in terms of their capacity to distinguish humans from other animals and one human from another.

Interpretive-satisfaction issues are the most complex, and they are the source from which all other actions should derive for maximum effectiveness. They are the most difficult issues to understand and address, but also the most important ones. Once they are understood, the identification of adaptive-resource actions and linear-goal actions is a straightforward exercise in drawing implications and making extrapolations. Before dealing with these interrelationships, it is useful to examine each approach to strategy separately.

Linear strategy. Linear strategy is highly rational and oriented toward planning. The term "strategic planning" represents linear strategy well. According to this view, strategy consists of integrated decisions, actions or plans that will set and achieve viable organizational goals. Linear strategy is therefore related to the goal approach to effectiveness, discussed earlier. The direct route to achieving organizational goals is to

use this strategy. As the word "linear" suggests, strategy in this mode is methodical, direct, sequential, plan-based action.

Successfully engaging in linear strategy carries several requirements. Top administrators must have considerable capacity to change the organization to comply with their plans, which they make by identifying their goals, generating alternative methods of achieving them, weighing the likelihood that alternative methods will succeed and deciding which ones to implement. They aim to capitalize on those future trends and events that are favorable while avoiding or counteracting those that are not.

The utility of the linear approach depends either on having a relatively predictable environment or on insulating the organization from its environment. To the extent that the environment is unpredictable and directly affects the organization, unforeseen events can ruin linear-strategy plans

Despite the increasing volatility and vulnerability of the world of higher education, linear strategy has a place in institutions and systems. Some key features of management and policy making will yield to this approach. For example, enrollment levels are certainly strategic variables for higher education. Although they cannot be predicted perfectly, enough is known about the demographics of the traditional college-age group and the participation patterns of the older population to permit useful forecasting and planning to deal with projected changes in enrollment.

Many financial functions, too, can be planned. At the policy level, systems working with institutions can assess current costs for programs, identify areas in which major capital investments may become necessary to keep a program or institution viable and predict changes in financial needs well enough to know whether major efforts will be required to handle them.

The usefulness of linear strategy for higher education is limited by its multiple, conflicting goals and its inability to predict many key environmental circumstances to buffer institutions from the environment. Furthermore, managers and policy makers

have difficulty in creating change expeditiously because of norms that require high participation in decision making and organizational inflexibilities such as faculty tenure and specialization and inability to "move the plant to a better location."

Adaptive strategy. Adaptive strategy recognizes volatile environments and the need for organizations to adapt if they are to continue to exist. The purpose of adaptive strategy is to develop a viable match between the demands of the environment and the activities of the organization. The idea of a viable match is as close as this approach gets to suggesting that organizations should have goals — the goal is the viable match. But the goal is never achieved because environments continue to change.

Adaptive strategy is a constant process of change in search of a viable match. The implicit aim of the match is to enable the organization to attract resources from the environment, so adaptive strategy is a potential route to effectiveness as defined in the resource acquisition approach.

Adaptive strategy supports the idea of looking into the future, both to identify predictable changes such as those appropriate for linear strategy and, perhaps more important, to guess what the major unpredictable changes might be. Adaptive strategy also suggests that the organization constantly examine its present circumstances to identify mismatches between what it does and what is needed. Compared with linear strategy, adaptive strategy is less centralized in top management, more multi-faceted and generally less integrated into an overall view of the organization's identity and future.

Probably the single most significant change in the higher education industry since 1970 has been its conscious shift toward adaptive strategy. The ivory tower has become an anachronism as colleges and universities shifted form admissions viewed as a selection function to admissions as recruitment, and from intellectual discussions about new program ideas to market-based discussions regarding whether the new program would attract enough students and provide them with jobs upon graduation.

Higher education institutions began offering courses in the evenings, taking courses to convenient locations and serving adult students in other special ways. Only the most elite or well-situated institutions have been exempt from these and other adaptations to declining public support for higher education, increasing demand for employment preparation as a goal of undergraduate education, and declining numbers of traditional-age students.

As valuable as adaptive strategy has been for many colleges and universities, it has limits. These institutions express certain purposes and traditions that cannot be abrogated without betraying their charters and fundamental reasons for existence. A business can change its products radically; a college cannot. Furthermore, even desirable changes may take considerable time to implement because of the institutions' dependence on personnel rather than capital, the specialized nature of faculty expertise and the relatively low rate of faculty turnover. Higher education can adapt, but usually slowly and always within fairly narrow limits.

Interpretive strategy. The third form of strategy suggests that organizations consist of implicit contracts among people, making an organization a collection of cooperative agreements entered into by individuals with free will. The organization's existence depends on its ability to attract enough individuals to cooperate in a mutually beneficial exchange. Interpretive strategy aims to attract and hold the individuals in an organization by ensuring that they perceive the benefits of participation.

For example, among the potential benefits of higher education to a student are opportunities to learn about interesting ideas, prepare for a job, participate in a congenial community and attend cultural and athletic events. But sometimes students get bored, wonder if they'll be employable, feel like outsiders or in other ways fail to perceive the benefits of participation, whether those benefits are really there or not.

Interpretive strategy focuses attention on the importance of perception: Just because a college is known for its high placement ratio for graduates doesn't mean that

students never drop out because they see no vocational future for themselves there. Are people wrong about the college, or are these students simply unable to connect? For these students, it doesn't matter — they see the college as unlikely to provide what they want and they leave. Interpretive strategy points out the importance of discovering how various constituencies perceive an organization and taking appropriate action to reinforce positive perceptions and repair negative ones.

Satisfaction is an attitude that bears only a moderate relationship to truth — that is, some people may be satisfied by inefficient or ineffective organizations or dissatisfied with organizations that accomplish their goals remarkably well. Stanford and Harvard have their disillusioned dropouts; Bootstrap University has its fervently loyal alumni.

Therefore, interpretive strategy deals with two worlds. One is the world of decisions, actions and events, such as those that comprise linear and adaptive strategy. The other is the world of communication, norms, language, attitudes, symbols, perception and relationships. The organization needs to act in ways that satisfy its constituents, but it also needs to interpret what it is doing so that constituents will see the organization as it wishes to be seen. The current emphasis on the importance of leadership with vision is a call for interpretation. Vision brings a sense of direction that enables everyone to contribute and feel significant.

What an organization does and what is says may differ from one another, but logic suggests that the greater the difference and the longer it persists uncorrected, the more likely constituents are to see through it. This dynamic prevents interpretive strategy from being an amoral manipulation of gullible constituents. Organizational leaders cannot long convey an erroneous interpretation of the organization because constituents have many sources of information that the leaders cannot control. Ultimately, the best interests of the organization are more likely to be served by truthfulness than by deceit. A central message of interpretive strategy is the importance of communicating about the organization, even when it may be painful to do so.

Interpretive strategy is one direct route to effectiveness, as described in the constituent satisfaction model. In fact, although the effectiveness and strategy literatures are fairly independent of one another, table 1 shows similarities in the approaches discussed here. Goal achievement corresponds to linear strategy, in which "plan ahead" might be the managerial motto. Resource acquisition is closely related to adaptive strategy, and organizations seek most of all to serve the public. Constituent satisfaction is linked with interpretive strategy, in which the goal is to develop a feeling that we're in this together and glad to be.

Integrating Three Views of Strategy and Effectiveness

Current theory holds what common knowledge would verify: Organizations need to use all three approaches to strategy and seek all three forms of effectiveness. Doing so is not as complicated as it might seem, for two reasons. Table 1 illustrates the first reason. Each approach to strategy bears a natural relationship to one of the forms of effectiveness. Therefore, organizations have a tool (an approach to strategy) with which to address each of their desired outcomes (forms of effectiveness). Interpretive strategy has special significance because by articulating institutional values, it provides a framework within which to incorporate and orient adaptive and linear strategy.

Second, the three forms of strategy and effectiveness represent an implicit hierarchy that guides decisions about how the three should relate to one another. At the top of the hierarchy is the interpretive model, followed by the adaptive and then the linear. Hierarchical does not mean sequential. Events can enter or leave at any level, and it is not necessary to go through the adaptive level in order to move between the linear and the interpretive.

Hierarchical means that the interpretive model, complex enough in itself, embraces also the complexities of the adaptive and linear models. The adaptive model incorporates the linear elements of the person or the organization, but it does not include

EFFECTIVENESS can be	STRATEGY can be	MANAGERIAL MOTTO
Goal Achievement	Linear	Plan Ahead
Resource Acquisition	Adaptive	Serve the Public
Constituent Satisfaction	Interpretive	We're in This Together and Glad to be.

Table 1. Parallel Views of Strategy and Effectiveness

the interpretive elements. The linear model excludes both the adaptive and the interpretive.

Starting at the most complex level, organizations and systems need to develop interpretive strategies to enhance constituent satisfaction and to let those interpretive strategies guide their decisions about adaptation (for resource acquisition) and linear planning (for goal achievement). Interpretive strategy makes adaptation sensible and coherent, rather than random, and it defines the organization's goals, some of which may be achieved through planning.

The next section takes these admittedly abstract concepts and applies them to systems of higher education, using the distinctions established in figure 2 among strategic leadership, system strategic management, strategic policy making and institution strategic management.

System Stretegic Leadership, Management and Policy Making

Strategic leadership is a system function, oriented toward statewide issues and the system as an organization that is greater than the sum of its parts. System strategic management also helps a system ensure that its central functions are headed in the right direction. In strategic policy making, the area where system and institutions overlap, responsibility is shared. The major system activities in this area area to set policies for the institutions and monitor key institutional functions.

Institution strategic management is the responsibility of the institution's chief executive officer. The three kinds of strategies that apply to the system level can be distinguished in the abstract, but in practice they overlap considerably. A system need not be actively engaged in all three at all times, but it is useful to pause occasionally to assess whether any of the three is being neglected.

Systems arose because of a perceived need for a statewide perspective in institutional management. That is, systems were created to engage in strategic policy

making. However, strategic leadership and system management are necessary preconditions for effective policy making. Systems are beginning to recognize this fact, but strategic leadership remains the most important and most overlooked function of systems in too many cases.

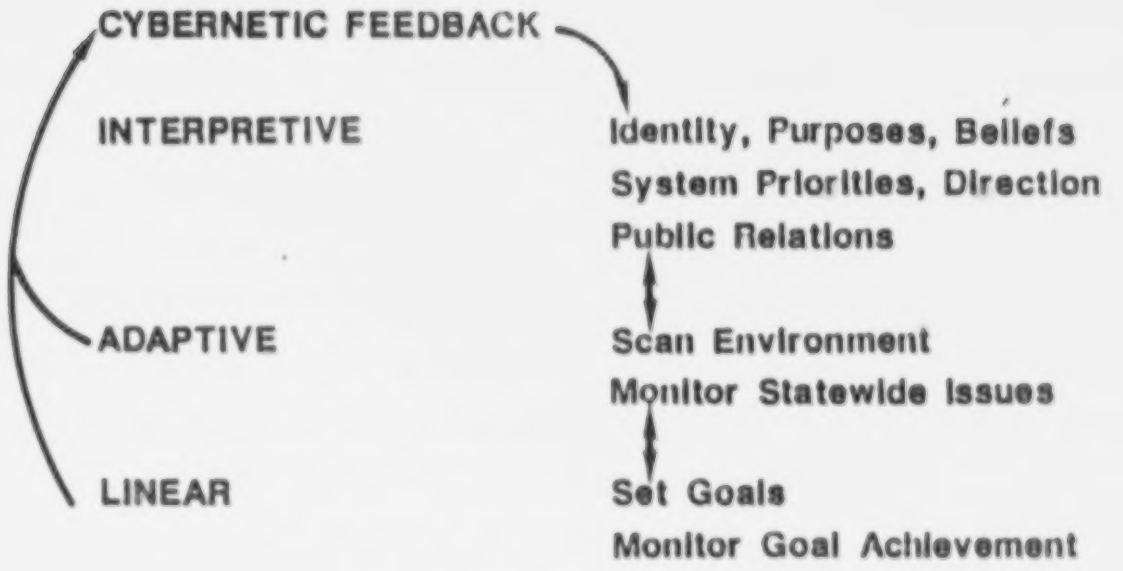
Strategic Leadership

Strategic leadership requires all three levels of strategy (interpretive, adaptive, and linear) as shown in figure 3. The interpretive level dominates and focuses such leadership. This is where systems create aspirations and establish direction. They do so with regard to the higher education industry in the state, the institutions collectively and the mix of institutional roles in the system. Strategic leadership requires conscious, continual, energetic attention if it is to succeed, but it is usually forgotten except in times of crisis.

The three fundamental tasks of strategic leadership at the interpretive level are articulating key elements of the system's indentity, purposes and beliefs; setting direction and priorities for the system; and communicating with constituencies. Certain adaptive and linear strategies supplement and inform these tasks.

The two major adaptive tasks are to scan the environment and monitor statewide issues. Scanning the environment means that the system actively seeks information about current and future conditions that may affect it. Systems need to know about impending changes in the economic climate, political circumstances, demographic parameters and other broad-scale shifts.

Where feasible, the system needs to set specific goals and monitor progress toward achieving the goals. At the interpretive level, a system may see a need to improve its relationships with the legislature. To do so, it may set goals for contacting legislators, encouraging others to contact legislators, publishing documents for legislators and so on. These activities lend themselves to goal-setting (how many



KEY ISSUES:

Define System Identity
Define Key Constituencies

Fig. 3 Strategic Leadership

legislators must be contacted, what changes are expected and how will we know when the changes have occurred).

In the process of implementing strategic policy decisions, the system should establish monitors to provide feedback about how it is experienced by key constituencies. Such feedback allows the system to take corrective action when necessary.

In the strategic leadership process, two key issues are central to success. First, the system must have a clear definition of its identity — what is it, why does it exist, what are its values? Second, the system must clearly understand who its key constitutencies are and, to the extent possible, place them in priority order. Priorities may differ from one specific issue or time to another, but the reasons for differences should be clear and an overarching priority list is an important component of system identity.

System Strategic Management

The need for system strategic management arises from the fact that the system must organize itself so it is capable of implementing both strategic leadership for higher education and strategic policy making for the institutions. Strategic leadership pertains to higher education in general, system strategic management to the system board and staff and strategic policy making to the system-institution interface. One way to think of the differences among the three is that institutional presidents might willingly help accomplish the goals of strategic leadership, would not be involved in system strategic management and may sometimes resist strategic policy making as a perceived intrusion on their prerogatives.

At the system strategic management level, systems can be more oriented toward operational issues than broad-brush conceptual issues. The focus here is on the board members and board staff and how they conduct business for the system as a whole.

The system needs to recognize and deal with those elements of strategic leadership that have little to do with the institutions. For example, if the board itself has low credibility because it is seen as highly politicized, that problem can become an input to system strategic management at the interpretive level. Possible solutions could include changes in who communicates about the system (interpretive), the issues that capture board attention (adaptive) or how the board organizes its meetings (linear).

At the interpretive level, figure 4 suggests that system strategic management also includes how the central part of the system represents itself to both internal and external constituencies, as well as how authority is distributed among the board, staff and other actors (what is reserved for the legislative or executive branches, the coordinating board or the institutions). The system needs to adapt as issues rise or fall in salience and as legislation is proposed by the board or by others. The system uses linear strategies such as written plans, formal analysis, staffing patterns and meeting agenda structure. In fact, some of the most fundamental concerns of a system are linear. They include personnel decisions (board members and staff) and rules or legislation authorizing the system board and delimiting its activities.

Strategic Policy Making

Strategic policy making deals with the interface between the system and the institutions, and it, too, requires all three levels of strategy with the interpretive level dominating the other two (see figure 5). The interpretive level should reflect the results of strategic leadership. It should include the system's philosophies regarding such topics as the importance of innovation, diversity and economic development on the campuses. The roles of the system board and its staff with respect to the institutions should be articulated, and the individuals selected to fill those roles should reflect and act consistently with strategic leadership decisions.

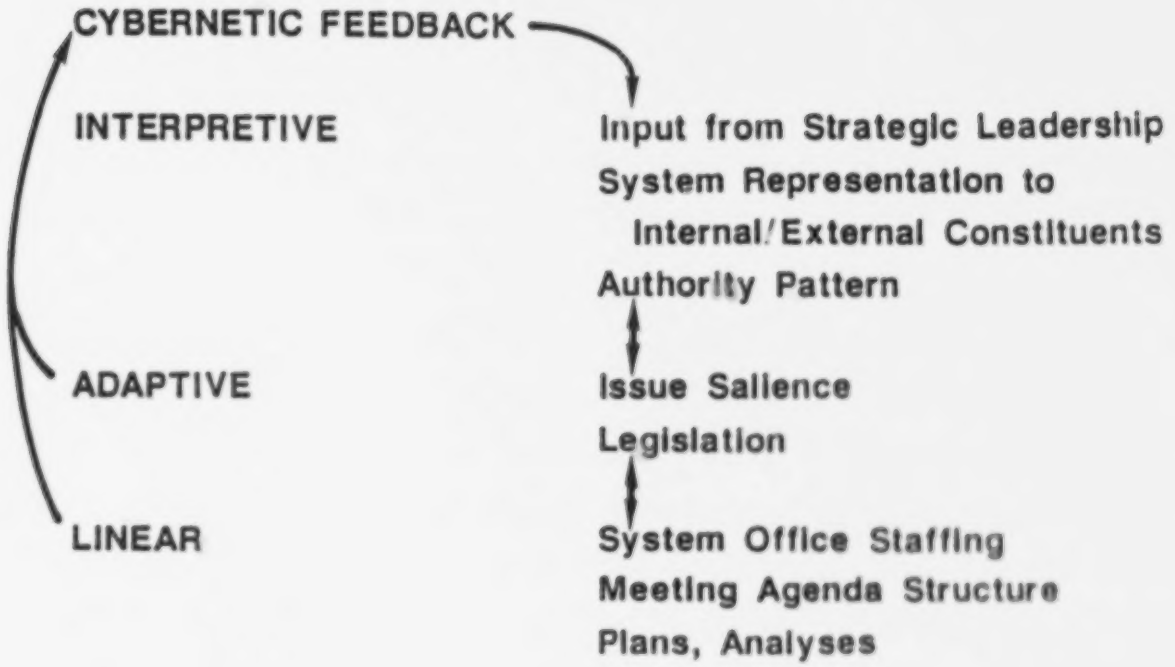


Fig. 4 System Strategic Management

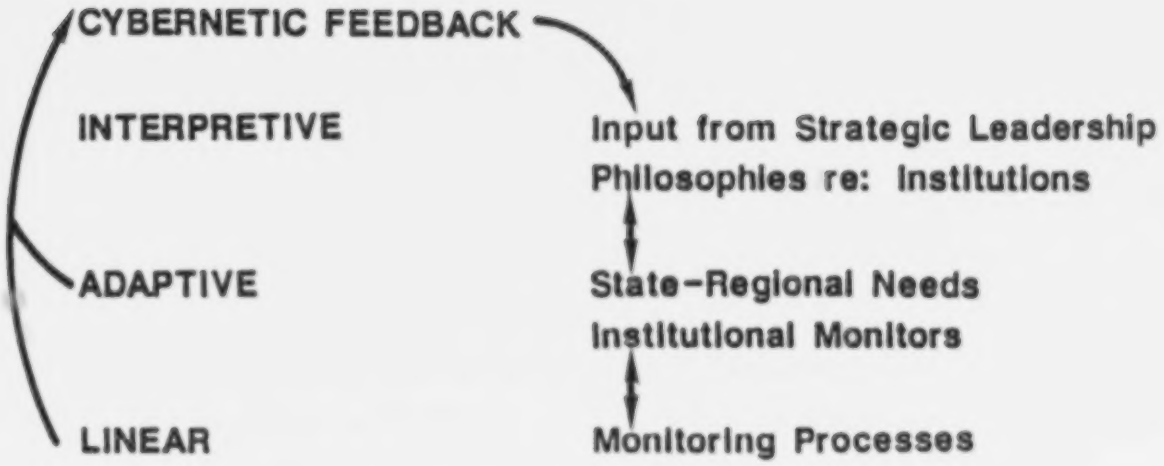


Fig. 5 Strategic Policymaking

At the adaptive level, the system needs to establish monitors that give information about both the needs of the state or region and the performance of the institutions. Key issues that such monitors are likely to address include academic programs, access to higher education, academic quality and public service.

The linear level provides a vehicle for accomplishing many of the changes that the adaptive monitors or interpretive values may suggest. The system needs to establish policies and monitors regarding institutional performance in various areas.

The literature on system activities suggests that the following areas are some of the most central to system functioning: goals, plans, and analyses; institutional relations; missions (including program review, state needs and access issues); and financial issues (including resource acquisition, budgeting, student charges and aid and physical plant). Policies and monitors in these areas can communicate the expectations the system holds for the institutions, express the system's priorities and values and provide feedback to the system when something goes wrong.

A study of how systems typically allocate their time and attention would probably show the majority at the linear level of strategic policy making. Systems produce a great many policies and procedures to guide institutional management, and much of their effort goes into the activities necessary to carry out those policies and procedures. The second greatest activity level is probably adaptive strategic policy making, with systems encouraging and approving institutional changes that are designed to respond to environmental changes.

This focus on relatively operational activities is understandable. These are the areas in which system boards have leverage on their focal constituency and can achieve results. In effect, they are the methods boards can use in their cybernetic, trial-and-error search for solutions to institutional problems.

If systems operate mainly at the level of linear and adaptive strategic policy making, all levels of strategic leadership, system strategic management, and the

interpretive level of strategic policy making occur implicitly rather than explicitly. When these fundamental tasks are overlooked, the results are likely to be inconsistent and incomplete. Systems run the risk of violating their beliefs, failing to notice important priorities and missing valuable opportunities. They may inadvertently set up conflicting expectations of their institutions. Therefore, the primary potential value of this discussion is that it points out fundamental concerns a system must address if it is to be effective.

Steps for Strategy Leadership, Management and Policy Making

In the ideal system, all levels of strategic leadership, system strategic management and strategic policy making occur simultaneously and interactively. It is therefore difficult to prescribe steps that a system should take to implement these ideas. Generally speaking, a system should:

1. Develop the interpretive levels of all three strategies, ensuring consistency among them
2. Identify the implications and needed actions to implement the results of its interpretive deliberations
3. Review existing statements, procedures and monitors to ensure that they correspond to the results of the interpretive strategies
4. Develop new and drop old statements, procedures and monitors as may be necessary to enact its interpretive strategies
5. Receive and act on the results of its monitoring processes
6. Go through these steps regularly as personnel and conditions change over time.

Toward an Effective System of Higher Education

How, then, does a system know whether it is effective? Systems are effective to the extent that they satisfy key constituencies, attract needed resources and achieve goals. From the idea of a cybernetic system comes the claim that effective systems are decentralized to the maximum feasible extent with regard to institutional activities, but they use monitors to ensure that vital processes are working.

Interpretive strategy contributes an emphasis on the importance of the system having awareness of its identity and dealing with the perceptions of its constituencies. Adaptive strategy suggests the importance of recognizing constituencies' needs and responding to them, and linear strategy suggests the importance of performing as expected and delivering on promises.

A checklist for some important elements of an effective system arises from these ideas. An effective system:

- has a conscious, explicit identity, purposes, beliefs, priorities and expectations of its institutions
- knows what the state needs with respect to higher education
- knows and corrects when the system does not meet appropriate state needs
- communicates with key internal and external constituencies
- is comprised of institutions that know what is expected of them
- decentralizes authority to the institutions except with regard to statewide concerns
- knows and corrects when an institution's performance fails to meet system expectations

Systems may spend far too much time on the last item in this list and far too little on the others. An effective system must search constantly for an appropriate balance among them.

Among the practical implications of these recommendations, one of the most important is its guidance in the system board's selection of a system chief executive officer. Systems need CEOs who have developed a clear personal philosophy about the roles and value of higher education generally and the type(s) of institutions that comprise the system in question. The philosophy must be consistent with the existing or desired philosophy of the state setting. CEOs need to be able to lead the system board to discuss and deal with abstract ideas, building toward consensus and appropriate action. CEOs need exceptionally strong communication skills to articulate and generate enthusiasm for the system view among many diverse constituencies.

CEOs also need the capacity to discern mismatches and inadequacies in the board, system staff and institutions. They need strong skills in synthesis and extrapolation so that they can juxtapose seemingly unrelated circumstances (such as the need for a shift in the state's economic base and the nature of higher education offerings in the system) and foresee their implications for the system.

Finally, CEOs need to be persuasive and to ensure compliance with high standards, but they should not be controlling when it comes to institutional operations. Rather, they need to know what kinds of monitors are important and how to use them as cybernetic processes.

In other words, the stronger CEOs are at the interpretive level, the more likely they will be able to lead systems in areas they most often overlook. When CEOs lead systems to attend to state higher education issues (strategic leadership) and the system as an organization (system strategic management), they can enhance the credibility of higher education in the state for the benefit of all.

These recommendations imply that boards will spend more time on system issues than institutional issues and that institutions will be involved not only in their own concerns but also in system issues. McGuinness suggests that systems should spend 75% of their time on system issues and 25% on the institutions, reversing the figures for how

institutions should spend their time. The suggestion is consistent with the point of view developed here. Yet many board agendas do not reflect this allocation. One way to move toward the ideas expressed here is simply to reallocate board agenda time to ensure that more is devoted to system issues.

Another way is to set aside a special time, perhaps annually, to discuss strategic leadership or interpretive strategy issues. This is not to say that a system should distance itself from its component institutions. The institutions provide critical intelligence on important issues and feasible solutions. The point is that many boards can profitably spend more time on system issues with institutional advice and less on institution-specific issues.

The system that acts in these ways can become what Ewell has called "self-regarding." It can see and adjust to broad evolutionary changes as well as short-term crises. It can recognize major points of imbalance and get them on the agenda. It can anticipate potential problems and resolve them. The system itself can learn. It will have the foundation on which to engage in constant betterment of higher education for the good of the state.

READINGS ON SYSTEM EFFECTIVENESS AND STRATEGY

Association of Governing Boards of Universities and Colleges. Self-Study Guidelines and Criteria for Governing Boards of Public Multicampus Higher Education Systems. Washington, D. C.: AGB, 1983.

Birnbaum, Robert. Understanding University Organization and Management. San Francisco: Jossey-Bass Publishers Inc., forthcoming.

Cameron, Kim. "Critical Questions in Assessing Organizational Effectiveness," Organizational Dynamics, Autumn 1980, pp. 66-80.

Cameron, Kim S. "Domains of Organizational Effectiveness in Colleges and Universities," Academy of Management Journal, vol. 24, no. 1, March 1981, pp. 25-47.

Cameron, Kim. "Constant Space and Subjectivity Problems in Organizational Effectiveness," Public Productivity Review, vol. V, no. 2, June 1981, pp. 105-121.

Cameron, Kim. "The Enigma of Organizational Effectiveness," in New Directions for Program Evaluation: Measuring Effectiveness, No. 11. San Francisco: Jossey-Bass Publishers, Inc., 1981, 1-13.

Chaffee, Ellen Earle. "The Concept of Strategy: From Business to Higher Education," in John C. Smart (ed.) Higher Education: Handbook of Theory and Research, vol. I. New York: Agathon Press, 1985, pp. 133-171.

Connolly, Terry; Conlon, Edward J.; and Deutsch, Stuart Jay. "Organizational Effectiveness: A Multiple-Constituency Approach," Academy of Management Review, vol. 5, no. 2, pp. 211-217.

Dressel, Paul L. (ed.). "The Autonomy of Public Colleges," in New Directions for Institutional Research, No. 26. San Francisco: Jossey-Bass Publishers, Inc., 1980.

Education Commission of the States. Coordination or Chaos? Report of the Task Force on Coordination, Governance and Structure of Postsecondary Education. Denver: ECS, 1973.

Education Commission of the States. Accountability and Academe: A Report of the National Task Force on the Accountability of Higher Education to the State. Denver: ECS, 1979.

Education Commission of the States. Challenge: Coordination and Governance in the '80s. Denver: ECS, 1980.

Ewell, Peter. The Self-Regarding Institution: Information for Excellence. Boulder, Colorado: National Center for Higher Education Management Systems, 1984.

French, Elizabeth and Berdahl, Robert. Who Guards the Guardians? The Evaluation of Statewide Boards of Higher Education, Occasional Paper No. 7. Buffalo, New York: Department of Higher Education, State University of New York at Buffalo, August 1980.

Glenny, Lyman. State Coordination of Higher Education: The Modern Concept. Denver: State Higher Education Executive Officers, 1985.

Kauffman, Joseph F. At the Pleasure of the Board: The Service of the College and University President. Washington, D. C.: American Council on Education, 1980.

Lee, Eugene C. and Bowen, Frank M. Managing Multicampus Systems: Effective Administration in an Unsteady State. San Francisco: Jossey-Bass Publishers, Inc., 1975.

Leslie, Larry L. and Hyatt, James (eds.). Higher Education Financing Policies: States/Institutions and Their Interaction. Tucson: Center for the Study of Higher Education, University of Arizona, 1981.

McGuinness, Aims. "Acting in Concert: Suggestions for System Board Members." Denver: SHEEO Task Force on Role and Mission, 1987.

Millard, Richard M. State Boards of Higher Education. ERIC/Higher Education Research Report No. 4. Washington, D. C: The American Association for Higher Education, 1976.

Mortimer, Kenneth P. and McConnell, T. R. Sharing Authority Effectively. San Francisco: Jossey-Bass Publishers, Inc., 1979.

Newman, Frank. Choosing Quality: Reducing Conflict Between the State and the University. Denver: Education Commission of the States, September 1987.

Pfeffer, Jeffrey. "Usefulness of the Concept," in Paul S. Goodman, Johannes M. Pennings and Associates. New Perspectives on Organizational Effectiveness. San Francisco: Jossey-Bass Publishers, Inc., 1977, pp. 132-145.

Pondy, Louis R. "Effectiveness: A Thick Description," in Paul S. Goodman, Johannes M. Pennings and Associates. New Perspectives on Organizational Effectiveness. San Francisco: Jossey-Bass Publishers, Inc., 1977, pp. 226-234.

Steinbruner, John D. The Cybernetic Theory of Decision. Princeton: Princeton University Press, 1974.

Weick, Karl E, "Re-Punctuating the Problem," in Paul S. Goodman, M. Pennings and Associates. New Perspectives on Organizational Effectiveness. San Francisco: Jossey-Bass Publishers, Inc., 1977, 193-225.

Zammuto, Raymond F. "A Comparison of Multiple Constituency Models of Organizational Effectiveness," Academy of Management Review, vol. 9, no. 4, 1984, pp. 606-161.